

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-56 (canceled)

Claims 57-61. (canceled).

Claim 62. (previously presented) A barrier film for limiting transmission of oxygen and moisture there-through comprising:

- (a) a polymer substrate having a first vacuum-formed plasma-treated surface;
- (b) a vacuum-deposited, first radiation-polymerized acrylate monomer film having first and second surfaces, the first surface of the first polymerized film being disposed on the first surface of the first plasma-treated surface of the polymer substrate;
- (c) a first inorganic layer having first and second surfaces, the first inorganic layer being disposed on the second surface of the first polymerized film; and
- (d) a vacuum-deposited, second radiation-polymerized acrylate monomer film having first and second surfaces, the first surface of the second polymerized film being disposed on the second surface of the first inorganic layer;

wherein the second surface of the second polymerized film is a vacuum-formed plasma-treated surface.

Claim 63. (previously presented): The barrier film of claim 62, wherein the polymer substrate is formed from a thermoplastic polymer.

Claim 64. (previously presented): The barrier film of claim 62, wherein the polymer

substrate is formed from a thermoset polymer.

Claim 65. (currently amended): The barrier film of claim 62, wherein the first [metal] inorganic layer is formed from a material selected from the group consisting of aluminum, zinc, nickel, cobalt, iron, iron on aluminum, zinc on silver, zinc on copper, zinc on aluminum, nickel-cobalt alloy, and nickel-cobalt-iron alloy.

Claim 66 (previously presented): A barrier film for limiting transmission of oxygen and moisture therethrough comprising

- (a) a polymer substrate having first and second plasma-treated surfaces,
- (b) a vacuum-deposited, radiation-polymerized acrylate monomer film disposed on each of the first and second plasma-treated surfaces of the polymer substrate; and
- (c) an inorganic layer disposed on at least one vacuum-deposited, radiation polymerized acrylate monomer film.

Claim 67. (new) A barrier film for limiting transmission of oxygen and moisture there-through comprising:

- (a) a polymer substrate having a first vacuum-formed plasma-treated surface and, optionally, a second vacuum-formed plasma treated surface;
- (b) a vacuum-deposited, first radiation-polymerized acrylate monomer film having first and second surfaces, the first surface of the first polymerized film being disposed on the first surface of the first plasma-treated surface of the polymer substrate and, optionally on the first surface of the second plasma-treated surface of the polymer substrate;
- (c) a first inorganic layer having first and second surfaces, the first inorganic layer being disposed on the second surface of the first polymerized film;
- (d) a vacuum-deposited, second radiation-polymerized acrylate monomer film

having first and second surfaces, the first surface of the second polymerized film being disposed on the second surface of the first inorganic layer;

(e) an additional inorganic layer disposed on the second surface of the second polymerized film, and

(f) an additional, vacuum-deposited, radiation-polymerized acrylate monomer film disposed on the additional inorganic layer;

wherein the additional polymerized film is a vacuum-formed plasma-treated film.